Fraction of events / 1 GeV $pp \rightarrow h \rightarrow 2n_{_1} \rightarrow 2n_{_D} + 2\; \gamma_{_D} \rightarrow 2n_{_D} + 4\mu$ $m_h^{} = 125 \; \text{GeV}, \; m_{_{D_1}^{}}^{} = 10 \; \text{GeV}, \; m_{_{D_2}^{}}^{} = 1 \; \text{GeV}$ 0.1 $m_{\gamma_D} = 0.3 \text{ GeV}, c\tau_{\gamma_D} = 1. \text{ mm}$ 1st n_D (leading p_T) 80.0 $-2nd n_D$ 0.06 0.04 0.02 0 120 20 40 60 80 100 of n [GeV]

CMS Simulation (LHE) 13 TeV